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Building and Operating Impedance Bridge

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SENIOR DESIGN PROJECT REPORT

on

BUILDING AN OPERATING IMPEDANCE BRIDGE

Prepared for

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at
Purdue University
Fort Wayne, Indiana

by

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December 15, 1978

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ABSTRACT

The Operating Impedance Bridge concept was introduced by Delta Electronics, Incorporated in 1963 and, fifteen years later, the Delta Operating Impedance Bridge is still the only test unit of its kind capable of directly measuring the operating impedance of an antenna at high power levels. This report will point out some of the unique abilities of this operating impedance bridge and present the technical data required to construct an operating impedance bridge with electronic components available at the local electronic supply store.

The operating impedance bridge is not a cure-all for impedance measuring, but it is a device that is capable of easily making antenna parameter measurements that are very difficult to secure with the standard form of impedance bridge.